

JUL 28 1997

FI-248

**AQUATIC BASELINE MONITORING FOR A PROPOSED REGIONAL
WASTEWATER TREATMENT FACILITY**

EXECUTIVE SUMMARY

- a. **Applicant Name:** Placer County on behalf of the Auburn Ravine CRMP Committee

- b. **Project Description and Primary Biological/Ecological Objectives**

Baseline monitoring data would be collected for Dry Creek (Roseville), Auburn Ravine, Dry Creek (Auburn), Rock Creek, Coon Creek, and the Pleasant Grove watershed. Water quality, benthic/aquatic invertebrates, and fish data would be collected at 65 sites in the 350-square-mile watershed area, in a manner consistent with CDFG's RBP approach or an equivalent.

This project is preliminary to potential development of a regional wastewater treatment facility which could have significant benefits to salmon-steelhead streams by reducing direct discharges into these streams. Water quality improvements would be significant, both in the watershed and downstream in the Sacramento River, benefitting regional water quality for Sacramento and for EBMUD. The treatment plant and its polishing marsh would benefit wildlife, such as the giant garter snake and red-legged frog.

- c. **Approach/Tasks/Schedule**

Sampling sites will be selected based on existing water quality data and a field reconnaissance. From Spring 1998 to Fall 1999, samples would be collected in spring and fall, and progress reports prepared. A final report would be prepared in March 2000.

- d. **Justification for Project and Funding by CALFED**

This study will contribute to two CALFED objectives: ecosystem restoration and water quality. A number of individual wastewater treatment plants in the area currently discharge pollutants into the 6 watersheds covered by this proposal. Baseline monitoring is the initial step in design of a treatment facility, and it will identify the nature and extent of water quality impacts to aquatic communities in the 6 watersheds. Ultimately, the treatment facility will enhance source water quality for all diverters downstream of the north Sacramento area.

These streams have a unique characteristic: they serve as conveyance channels for water supply and therefore flows are not an issue. Enhanced water quality may therefore have an immediate and significant impact on fisheries, including steelhead and fall-run and spring-run chinook salmon.

- e. **Budget Costs and Third Party Impacts**

The County is requesting Category III funds in the amount of \$529,100 to complete this project. Completion of this project could provide major benefits to potential participants in the proposed regional wastewater treatment facility by providing essential background data, eliminating potential project delays due to controversies over the quality of baseline data, and providing data in an expeditious manner that could expedite completion of a new plant.

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f. Applicant Qualifications

Placer County is responsible for existing water quality monitoring related to wastewater treatment and has qualified in-house staff for routine monitoring activities. Technical experts will be hired on a competitive basis to provide baseline data with input and oversight from Members of the Coordinated Resource Management Planning committee, the Resource Conservation District and county staff.

g. Monitoring and Data Evaluation

This project is a monitoring and analysis project. Timely sharing of data with CALFED and others is ensured by the seasonal progress reports required.

h. Local Support/Coordination with other Programs/Compatibility with CALFED objectives.

This project has the support of the Auburn Ravine CRMP committee and is consistent with County planning efforts. Regardless of the treatment plant option selected, the baseline monitoring will allow rapid impact and benefit analysis. The project does not will provide CALFED with data on the fisheries resources and water quality problems of the watershed, and may therefore be the basis for other projects and restoration efforts, beyond the treatment plant.

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1997 Category III
Ecosystem Restoration Projects and Programs
Proposal, Section II: Title Page

for

Auburn Ravine and Coon Creek Watershed
AQUATIC BASELINE MONITORING FOR A PROPOSED REGIONAL WASTEWATER TREATMENT
FACILITY

Submitted by Placer County
on behalf of

The Auburn Ravine Coordinated Resources Management Planning Group

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County Government - exempt
Fed: 94-6000527
State: 69-0930630

Participants and Collaborators:

Placer County
The Auburn Ravine CRMP committee
RFP Project Group III: Services

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III. PROJECT DESCRIPTION

a. Project Description and Approach

A number of individual wastewater treatment plants in Western Placer County are either under cease and desist orders of some type or near their design capacity. The County is experiencing one of the fastest rates of growth of any area in the State. Water quality might be best served by construction of a regional wastewater treatment facility that will serve the needs of several Western Placer County cities and unincorporated areas. However, there is only limited data collected on stream water quality, fishery resources, and the benthic aquatic communities in these Sierra foothills streams. This project is designed to provide minimal baseline information on water quality, fishery resources, and the benthic aquatic communities in the selected streams and identify aquatic issues for a formal EIR process.

This project would collect baseline data on the following stream watersheds which would be influenced (both positively and potentially negatively) by construction of a regional wastewater facility:

- Dry Creek (Roseville) watershed in the area influenced by a regional facility
- Auburn Ravine
- Rock Creek watershed near Auburn
- Dry Creek watershed (near Auburn)
- Coon Creek watershed
- Pleasant Grove watershed (near Rocklin)

This project will consist of baseline water quality, benthic aquatic invertebrate, and fishery resource surveys at approximately 65 sites within the combined approximately 350 square mile area encompassed by the 6 watersheds. Attempts will be made to collect the benthic aquatic invertebrate and fishery resource information at the same sites using California Department of Fish and Game's Rapid Bioassessment Procedure (RBP) or equivalent and electrofishing, respectively. The number and location of water quality sites will depend on the results of a preliminary siting study currently being conducted by the County. However, it is anticipated that sufficient water quality information would be collected to develop some minimal baseline on conditions in each of the watersheds. The water quality component will not include a complete EPA scan. Fish and aquatic benthic invertebrates will be collected in the late spring immediately after high flows and in the late fall immediately before winter high flows over a two year period. Water quality monitoring will be designed to maximize the benefits based on the preliminary siting result.

Results will be summarized and provided to both CALFED and CVPIA monitoring programs. During field visits, any aquatic resource problems or issues will be identified so that they may be considered during the formal EIR process. Opportunities for mitigation banking and further projects to meet the CALFED ecosystem restoration objectives and mandates of CVPIA will be documented.

b. Location and/or Geographic Boundaries of Project

The project would encompass the portions of the watersheds that would be influenced by construction of a regional wastewater treatment facility. The following watersheds would be influenced by a regional wastewater facility either through having stream flows or wetland areas augmented

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by discharge from a facility or by having existing effluent discharges withdrawn from one of the streams:

- Dry Creek (Roseville) watershed in the area influenced by a regional facility
 - Auburn Ravine
 - Rock Creek watershed near Auburn
 - Dry Creek watershed (near Auburn)
 - Coon Creek watershed
 - Pleasant Grove watershed (near Rocklin)
- (See Attachment 1 - map)

c. Expected benefit(s)

Primary stressors, species, and/or habitats addressed: seasonal wetland and aquatic habitat, instream aquatic habitat, shaded riverine aquatic habitat; steelhead trout, spring-run chinook salmon, splittail, fall-run chinook salmon, delta smelt (proximity to Sacramento confluence is unknown but fish do spawn upstream of the tributary entrance to the Sacramento River), and migratory birds. While this project will provide only baseline monitoring data and identification of potential projects for CALFED and/or CVPIA, construction of a regional wastewater treatment facility will have significant direct benefits and multiple indirect benefits to the CALFED objectives. A regional treatment plant would eliminate direct discharges to Dry Creek (Roseville), Auburn Ravine, and Rock Creek-Dry Creek (Auburn)-Coon Creeks. These discharges directly influence water quality and fisheries habitat for the steelhead, spring-run chinook, splittail, and fall-run chinook which use these watersheds. Improvements in water quality would effect withdrawals immediately downstream of the confluence with the Sacramento River such as EBMUD's proposed pumping plant at the confluence of the Sacramento and American Rivers. In addition, one of the benefits of a regional facility would be a polishing marsh established for the effluent with subsequent water quality and associated wildlife benefits to species such as giant garter snake and red legged frogs.

d. Background and Biological/Technical Justification

The Western Placer County area is one of the fastest growing areas in the State. Several existing wastewater treatment plants are either under cease and desist orders or near capacity and must be expanded. Most of the treatment plants within the drainages in the project area discharge effluent directly to the stream. Numerous violations and fish kills have been reported. Some jurisdictions are considering the possibility of constructing a regional treatment plant as the solution to a multitude of problems. While there would be a number of benefits associated with regional sewer treatment, biological and water quality data for affected streams are generally lacking with only limited small project specific data available.

The focus of this project is to develop baseline water quality data to support environmental documentation for a regional facility. During the course of the proposed sampling, additional projects would be identified which would be included in the watershed level Coordinated Resource Management Plan (CRMP). Note: Placer County has submitted companion proposals to Category III to develop watershed plans for the Dry Creek (Roseville) and Auburn Ravine-Coon Creek watersheds.

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The most important factor with regard to these streams is their unique character. While most streams in the Central Valley suffer from extreme water shortages during the summer months due to water withdrawals high in the watershed, these systems serve as water conveyance channels with major withdrawals occurring in the rice growing areas adjacent to the Sacramento River. As a result, fishery resource values are greatly enhanced since ample cold water is available in most of the salmonid rearing areas throughout the summer. Spawning migration timing by steelhead, spring-run chinook, and fall-run chinook occurs outside the major rice irrigation season. Note: Early returning fall-run may experience some delays if fall rains occur late in the year, but another companion proposal has been submitted to assess any fish passage and/or screening needs in these watersheds.

e. Proposed Scope of Work

Task 1: Accumulate and review existing data. Most existing data has recently been summarized for some of the watersheds because of EIR preparation. Other watersheds have not had any systematic collection of data for many years, if at all, according to the local Department of Fish and Game Biologist.

Task 2: Conduct field reconnaissance and develop the logistical information to conduct the sampling. This task includes establishing the locations that will be sampled, including determination of access, landowner permission, etc. It also includes contracting with the Department of Fish and Game or some other qualified entity to conduct the aquatic benthic invertebrate sampling and/or fish sampling.

Task 3: Establish water quality monitoring stations and collect data based on a preliminary study for the regional facility currently underway and funded by the Placer County Board of Supervisors. The preliminary study will also identify potential sites for a regional facility. The actual number of monitoring stations and parameters for monitoring will depend upon proposed facility location.

Task 4: Conduct spring sampling (spring 1998), summarize data, and report preliminary results.

Task 5: Conduct fall sampling (fall 1998), summarize data, and report preliminary results.

Task 6: Conduct spring sampling (spring 1999), summarize data, and report preliminary results.

Task 7: Conduct fall sampling (fall 1999), summarize data, and report preliminary results.

Task 8: Complete final data analysis and write final reports. (Final reports March 2000)

f. Monitoring and Data Evaluation

Since this project is a monitoring and data evaluation project, little explanation is needed. The data collected will be summarized and spatio-temporal distribution of data parameters will be reported. Any anomalous water quality values will be highlighted. A separate report on future project opportunities will be prepared.

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g. Implementability

Implementing this project will require collecting permits from the California Department of Fish and Game and National Marine Fisheries Service. No other permitting is required. Landowner cooperation is needed, but no problems in receiving cooperation are anticipated. Timing of contract award is critical since a spring (April) sampling schedule is anticipated.

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IV. COSTS AND SCHEDULE TO IMPLEMENT PROPOSED PROJECT

a. Budget Costs

Table 1: Estimated Costs for Aquatic Baseline Monitoring for a Regional Wastewater Treatment Facility

BUDGET COMPONENT	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8
Direct Labor								
Direct Salary and Benefits								
Overhead Labor (General Admin.)	750	15,900	22,500	7,500	6,750	6,750	6,750	5,250
Service Contracts	5,000	106,000	150,000	50,000	45,000	45,000	45,000	35,000
Material and Acquisition Contracts								
Ongoing Input and Review (CRMP Members)	4,537	4,537	4,537	4,537	4,537	4,537	4,537	4,537
Miscellaneous and Other Direct Costs								
TOTAL PROJECT COST	10,287	126,437	177,037	62,037	56,287	56,287	56,287	44,787
(IN-KIND CONTRIBUTION)	4,537	4,537	4,537	4,537	4,537	4,537	4,537	4,537
TOTAL CATEGORY III FUNDING REQUEST BY TASK	5,750	121,900	172,500	57,500	51,750	51,750	51,750	40,250
TOTAL CATEGORY III FUNDING	\$553,150							

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b. Schedule Milestones

SCHEDULE MILESTONES		
Task 1:	Accumulate previous data	January 1998
Task 2:	Conduct field reconnaissance; contract with the Department of Fish and Game or other qualified entity to conduct aquatic benthic invertebrate sampling.	March 1998
Task 3:	Establish water quality monitoring stations and collect data.	January 1998 - Dec. 1999
Task 4:	Conduct spring fish sampling, summarize data, and report preliminary results.	April - June 1998
Task 5:	Conduct fall fish sampling, summarize data and report preliminary results.	Oct - Dec. 1999
Task 6:	Conduct spring fish sampling, summarize data, and report preliminary results.	April-June 1999
Task 7:	Conduct fall fish sampling, summarize data and report preliminary results.	Oct-Dec. 1999
Task 8:	Complete final data analysis and write final reports.	March 2000

c. Third Party Impacts

Completion of this project could provide major benefits to a number of jurisdictions in Placer County that would be potential participants in the proposed regional wastewater treatment facility by providing essential background data, enhance the quality of baseline data on water quality and provide data in an expeditious manner that could facilitate completion of a new plant.

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V. APPLICANT QUALIFICATIONS

Throughout the planning process, the planning team will draw on resources of committee members. The CRMP planning committee includes a wide range of state, federal and local governmental agencies, as well as, private non-profits and private land owners. A list of the core group from the Auburn Ravine CRMP committee is attached. The CRMP Committee will work with the Resource Conservation District and county staff to select, on a competitive basis, the appropriate project team including technical experts in water quality monitoring and fish habitats. The Director of Environmental Health will provide for project management with staff persons experienced in water quality monitoring providing oversight on an ongoing basis. Certain administrative functions will be handled at the direction of the County Executive Office. County staff and the RCD will serve to provide coordination and linkages between the CRMP committee and existing studies and technical information currently being prepared.

Richard K. Swanson, R.E.H.S. - Project Manager
Placer County, California, Environmental Health Director 1989 to present.
Linn and Benton Counties, Oregon, Environmental Health Director, 1975 to 1988
Environmental Health professional since 1969
Graduate Fresno State, 1968

Mr. Swanson has extensive experience in onsite sewage disposal regulation and monitoring as an Environmental Health Specialist and Environmental Health Director in both Oregon and California. He is also experienced in stream water monitoring and oversees the staff conducting the current water quality monitoring program in Auburn Ravine in Placer County. This program identifies public health and water quality impacts of the City of Auburn's sewage treatment plant and leaking sewer discharges. This monitoring program is being done as the result of enforcement activities initiated by the Central Valley Regional Water Quality Control Board against the City of Auburn. The current program includes monitoring for pH, MBAS, Chlorine residuals, Alkalinity, Conductivity, Turbidity, Ammonia, Dissolved O₂, Chlorides, Phosphorus, Coliform MPN (total and fecal), and color, odor, and foaming. He also oversees a similar program downstream from County SMD #1.

Richard Gresham, Manager, Placer County Resource Conservation District - Administrative/Technical

Mr. Gresham has been the manager of Placer County RCD since 1978. He has a Master's Degree in Urban and Regional Planning from Fresno State. The Soil and Water Conservation Society and the International Erosion Control Association had granted him the use of the professional designation "Certified Professional in Erosion and Sediment Control". Under the direction of Mr. Gresham, the RCD has received, managed and successfully completed numerous state and federal grants for natural resource and conservation related projects and programs. The RCD has an ongoing agreement with Placer County to provide for planning and implementation of conservation and natural resource programs and assistance with general and community plans.

Lynn A. Johnson, R.E.H.S. - Technical
Placer County, California, Supervising Environmental Health Specialist 1972 to present.
San Bernardino County, California, Staff Sanitarian 1966 to 1970
Graduate Cal Poly, San Luis Obispo 1965

Mr. Johnson has extensive experience in onsite sewage system evaluation and regulation in Placer County, and was jointly responsible for the first major ordinance in this County which recognized the importance of onsite sewage

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system siting to surface and ground water quality. He has assisted in the Auburn Ravine water quality monitoring program and is currently involved in developing linkages between the Placer County Environmental Health Services Division and community action groups in watershed management and benthic macroinvertebrate monitoring. He regularly participates in several CRMP group meetings and in Rapid Bioassessment field collection and laboratory activities of one CRMP group.

Thomas M. Carmichael, R.E.H.S. - Technical
Placer County, California, Supervising Environmental Health Specialist 1972 to present
Graduate San Jose State

Mr. Carmichael has extensive experience in all aspects of environmental health. He has headed up both land development and traditional public health programs in the County. His experience includes monitoring and enforcement actions against unlawful small sewage treatment plant discharges. He assisted in the design and currently directly supervises the program of water quality monitoring in Auburn Ravine targeted at public health and water quality problems caused by discharges from the City of Auburn sewers and sewage treatment plant. He also supervises the program monitoring effects of County Sewer Maintenance District#1.

Holly L. Heinzen, Principal Analyst, Placer County - Administrative

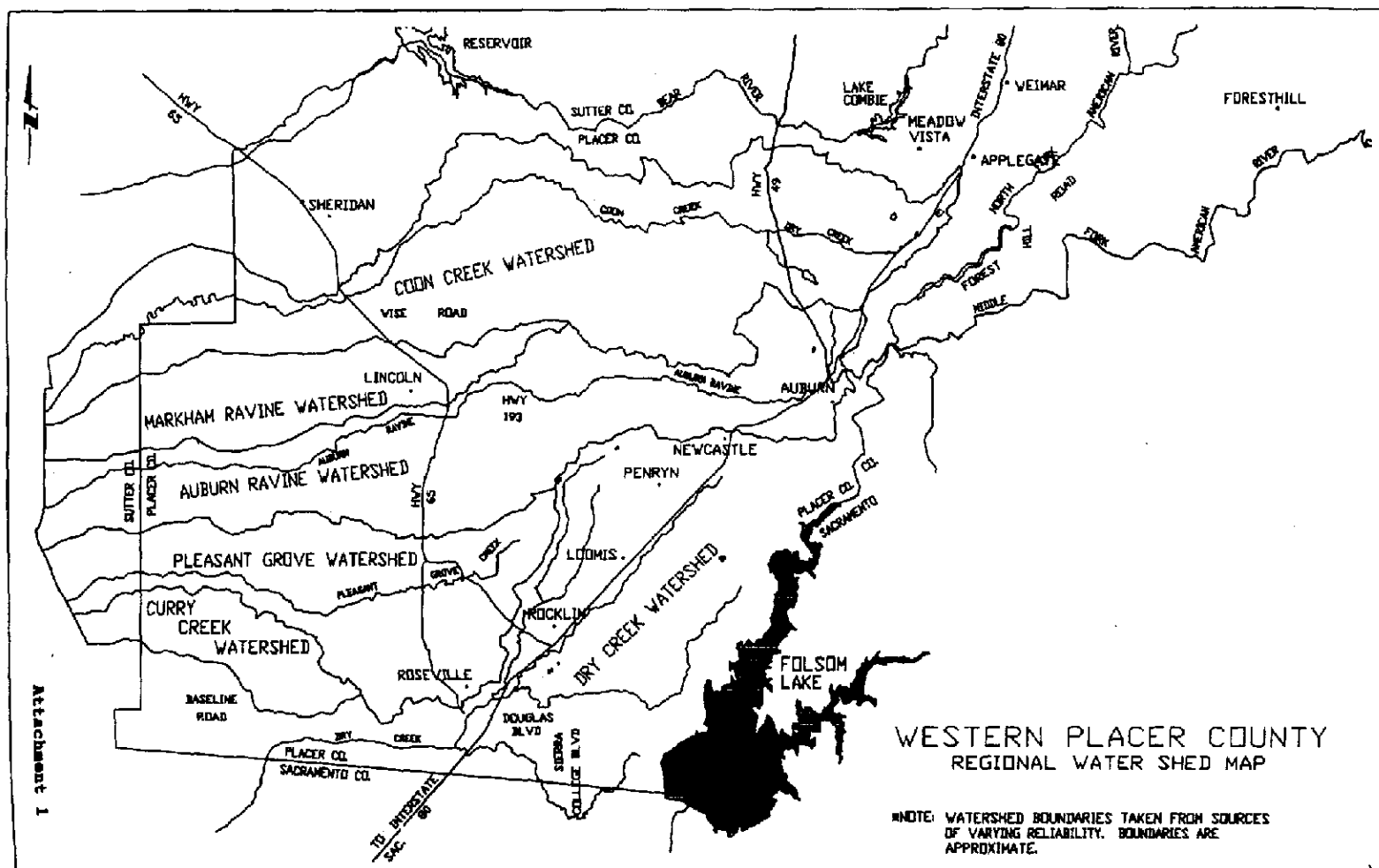
Ms. Heinzen has a Masters in Public Administration and has been a member of the County Executive Office since 1985. Holly has managed a wide range of agreements with public and private agencies and coordinated countywide projects and programs involving diverse interests. Additional experience includes work on state and federally funded grant programs, including contract negotiation, program monitoring and evaluation. Other responsibilities include fiscal planning and public facility financing, fiscal studies, and assisted in preparation of the countywide general plan and a number of community plans.

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VI. COMPLIANCE WITH STANDARD TERMS AND CONDITIONS

The terms and conditions specified are agreeable and will be complied with by the applicant. Attached is the Nondiscrimination Compliance Statement for Placer County.

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NONDISCRIMINATION COMPLIANCE STATEMENT

COMPANY NAME

PLACER COUNTY

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME

GLORIA COULTS

DATE EXECUTED

JULY 25, 1997

EXECUTED IN THE COUNTY OF
PLACER

PROSPECTIVE CONTRACTOR'S SIGNATURE

PROSPECTIVE CONTRACTOR'S TITLE

ASSISTANT COUNTY EXECUTIVE OFFICER

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

COUNTY OF PLACER